

REMARKS/ARGUMENTS

Claims 10-25 are active in this case.

Claims 10-17 are new claims reformatting original Claims 1-9 with Claim s10 and 18 corresponding to Claims 1 and 2 with the incorporation of Claims 5 and 8.

No new matter is added.

The objections noted on page 2 of the Action are no longer applicable.

In the Official Action, the Examiner has rejected the claims as being obvious in view of the combination of Gaberc, Hauptmann (U.S. Patent No. 6,271,346) and Staples (U.S. Patent No. 5,169,936). The Gaberc and Staples citations are used by the Examiner primarily for the IMAC procedure utilizing copper as the immobilized metal (see also page 2 of the specification). The Examiner then cites to the Hauptmann patent as to the purification of TNF-binding proteins on certain types of chromatography columns. As a result of these disclosures, the Examiner considers that it would have been obvious to purify TNF-binding proteins using the IMAC procedure with copper. \

The claims of the application are directed to the purification of human TNF-1 with a copper-based immobilized metal affinity chromatography followed by Ion Exchange Chromatography (IEC) at an acidic pH, followed by an ion exchange chromatography at a basic pH. This method is not described in the cited art.

As discussed in the background section of this application on page 2, while it is true that IMAC with copper was known, there was no way to know with a reasonable predictability of success that h-TBP-1 would behave the way they did as shown in the example. That is, until the inventors applied the human TNF-1 to the IMAC procedure followed by Ion Exchange Chromatography (IEC) at an acidic pH, followed by an ion

exchange chromatography at a basic pH as shown in the examples, there would be no way to know that it would reasonably work.

Reconsideration and withdrawal of the rejection is requested.

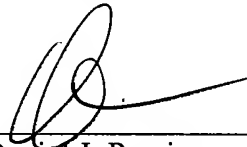
The Examiner has also rejected the claims based on a lack of enablement for the isolation and preparation of all TNF-binding proteins known or to be discovered in the future notwithstanding the listing provided in the specification. This rejection is inapplicable to the claims because as already acknowledged in the Action the specification provides detailed basis for isolation and purification of human TNF-binding protein-1, which is what is provided in the claims.

Withdrawal of the rejection is requested.

A Notice of Allowance is also requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Daniel J. Pereira  
Registration No. 45,518

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)